

Utah Electric Utility Energy Efficiency Programs: A Success Story

November 2018

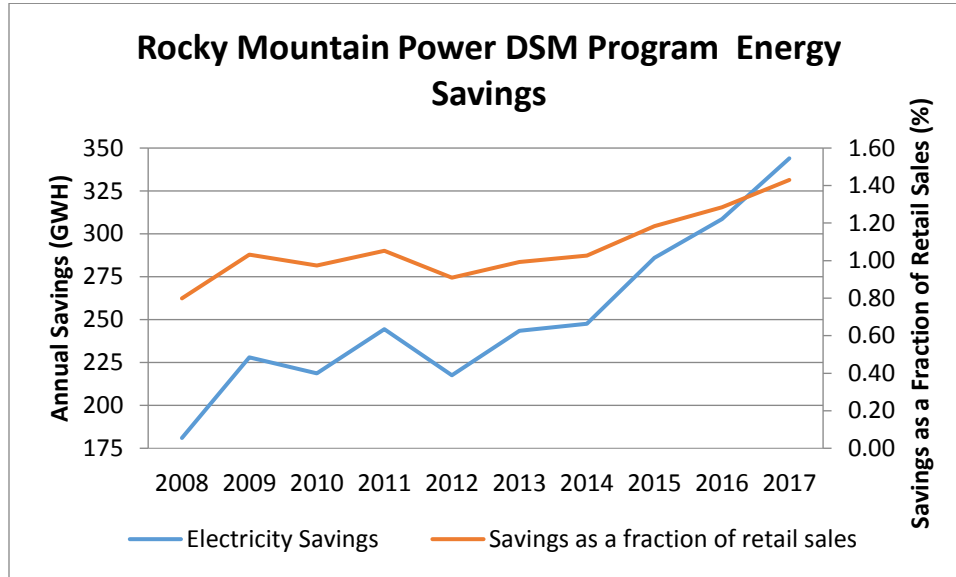
History

- PacifiCorp, doing business in Utah as Rocky Mountain Power (RMP), is Utah's sole investor-owned electric utility providing about 81% of the electricity consumed in the state. In 2018, RMP offered seven energy efficiency and other demand-side management (DSM) programs to their customers.
- Several dockets before Utah Public Service Commission (PSC) during 1980-90 established policies pertaining to utility DSM programs. The PSC established the Integrated Resource Plan (IRP) requirements for PacifiCorp in 1992. The IRP is the primary driver of DSM program savings goals.
- In 2002, the Utah Legislature enacted a law allowing for an energy efficiency tariff rider as well as an industrial self-direction bill credits program. In October, 2003 the PSC approved a DSM tariff rider (Schedule 191) to enable RMP to recover the costs for its approved DSM programs in a timely manner. As of November, 2018 the DSM tariff rider was equal to 3.66% of customer bills.
- In 2009, a Joint Resolution on Cost-Effective Energy Efficiency and Utility Demand-side Management (H.J.R. 9) was adopted by the Utah Legislature. H.J.R. 9 urged utilities to promote all available cost-effective energy efficiency and conservation, set voluntary energy savings goals for Rocky Mountain Power and Questar Gas Company, and endorsed supportive regulatory mechanisms such as decoupling.
- In 2009, the rules for Utah's DSM programs were revised. The PSC adopted the Utility Cost Test as the primary cost effectiveness test for DSM programs in Utah.
- In 2012, RMP formed a DSM Steering Committee comprised of representatives from PSC staff, the state's consumer advocate, energy consumers, and energy efficiency advocates. The Committee provides feedback to RMP on DSM program design and policy issues.

Impacts of Energy Efficiency Programs

- RMP invested a total of \$549 million in DSM programs during 2008-17. Program expenditures and energy savings have been increasing since 2012, as shown in the table and chart below.
- RMP's customers saved over 2.3 billion kWh of electricity as of 2017, due to programs and measures implemented during 2008-17. This amount of electricity savings is equal to nearly 10% of total electricity consumption by RMP's customers as of 2017. It is also equivalent to the electricity use of 264,000 typical households served by RMP.
- RMP avoided about 1.6 million metric tons of CO₂ emissions in 2017 due to energy efficiency programs implemented during 2008-17. The reduction in CO₂ emissions is equivalent to taking about 330,000 passenger vehicles off the road.

- RMP’s DSM programs are very cost effective. RMP and its customers will save approximately \$1.14 billion net as a result of DSM programs implemented during 2008-17.
- Utility energy efficiency programs increase employment through the production, sales and installation of energy-efficient products and services. A recent U.S. DOE study estimates that there are over 31,000 jobs in Utah related to improving in energy efficiency.



Program Results for RMP’s DSM Programs

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
DSM Program Expenditures (million \$)	34.4	58.2	49.4	45.1	47.1	55.2	81.6	61.2	60.4	55.8	549
Peak Reduction (MW)	98	143	159	166	138	116	124	106	116	121	N/A
Electricity savings (GWh/year)	181	228	219	244	218	243	248	286	308	344	2,335
CO2 emission reduction (thousand metric tons/year)	127	157	139	169	150	168	176	201	217	241	1,634
Savings as percentage of retail sales	0.80	1.03	0.97	1.05	0.91	0.99	1.03	1.18	1.28	1.43	N/A
Portfolio cost-effectiveness	--	1.95	1.82	2.17	2.16	2.05	2.16	1.53	1.98	2.23	N/A
Net economic benefits (million \$) UCT	75.0	106.8	91.0	128.0	134.1	141.1	140.2	62.4	116.0	139.8	1,135

Notes: Peak reduction values from load management programs only; CO2 emissions reductions assume electricity savings avoid electricity generation by coal-fired and gas-fired power plants in equal amounts; 2008 net economic benefits are an estimate by SWEEP.

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